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## General Index

of the

# Reports of the Bureau of Mines

Ontario

Volumes I to XVI

(1891=1907)

Compiled by Frank J. Nicolas.

Printed by Order of the Legislative Assembly of Ontario



10/987

WARWICK BROS' & RUTTER, Limited, Printers, TORONTO.

#### INTRODUCTORY LETTER

To the Honourable F. Cochrane,
Minister of Lands, Forests and Mines.

SIR,—The need for a consolidated or General Index of the Reports of the Bureau of Mines has been apparent for some time, and is being more and more felt as the reports increase in number. The Bureau's annual volumes, beginning with its establishment in 1891, have chronicled the progress of the mining industry in Ontario; have recorded the discovery and development of the mineral fields which have successively claimed attention; have embodied the results obtained by competent investigators into the geology and mineralogy of the newer and less-known portions of the Province, and have, from year to year, endeavoured to correlate the mineral arts of Ontario with the steady advances everywhere being made in knowledge and in practice.

It has been the aim of the Bureau to carry on its work in such a way as to fulfil the object for which it was created, which, in the language of the Statute of 1891,\* is "to aid in promoting the mining interests of the Province."

Necessarily, the methods adopted by the Bureau to this end have been both varied and practical in their nature. Working out the geology and defining the limits of mineral-bearing districts; ascertaining the extent and characteristics of the formations found to carry ores or mineral substances of any useful kind, and describing them so as to enable men unskilled in technical terms, as well as trained geologists, to recognize them in the field; collecting statistics of output and value of the mineral production; investigating problems of treatment and the possibility of utilizing neglected or waste materials; these and similar means have been employed as occasion called for, in the hope of obtaining results that would subserve the mineral industries of the Province and be of use to the prospector, the miner, and the investor. But no hard and fast line can be drawn between the "practical" and the "scientific." The practical is but the scientific put into use, and it often happens that knowledge won for its own sake, without hope or expectation of reward, and which does not appear to have any immediate economic bearing, proves sooner or later to be intrinsically utilitarian.

Accordingly, the Bureau has believed it advisable not to neglect certain of its functions, which may perhaps be regarded as less severely practical than those already mentioned. The geology of a great part of Ontario, for instance, is of pre-Cambrian age. Fossiliferous evidence being absent, and lithological characteristics often of uncertain interpretation, the determination and classification of the various formations and the ascertaining of their relationships to one another present many difficulties. Yet the successful decipherment of the geological record may shed much light upon questions arising in the actual exploitation of mineral deposits, and may provide or suggest a solution of problems often perplexing to the mining engineer. An instance in point is afforded by the Cobalt mining district. The interpretation of the geological phenomena of that region by Professor W. G. Miller, the Provincial Geologist, and his assistant, Mr. Cyril W. Knight, during the short period of the field season of 1904, involving, as it did, a revision of the work and conclusions of previous observers in districts containing the same rocks, provided a basis for working the deposits of that unique field which has proven of the utmost service in actual

practice. Nor is it upon such occasions only that geology comes to the aid of industry. It has happened more than once that a geologist, intent only upon observing and correlating the rock formations of the district under his examination, and paying little or no regard to economic minerals or their indications, has produced a report and map which later have served as an invaluable guide to prospectors in the same field, upon valuable minerals being discovered therein.

"Knowledge," says Dr. Johnson, "is of two kinds. We know a subject ourselves, or we know where we can find information upon it." The reports of the Bureau, containing, as they do, a fairly complete record of the Province's mineral industry since they began to be published, as well as a large amount of information concerning the geology and mineral resources of the Province, are naturally in constant demand by those who are interested in particular minerals, deposits, or districts, in the possible and actual resources of the Province or any part of it, in the origin and progress of any branch of the mining industry, or in any other of the thousand and one features with which the reports must necessarily deal. To know where such information can be obtained when wanted is the really important thing, for no one memory can be trusted to contain and reproduce correctly such a mass of detail.

The General Index submitted herewith covers the Report of the Royal Commission on the Mineral Resources of Ontario, published in 1890, the first sixteen annual Reports of the Bureau of Mines, beginning with 1891 and ending with 1907, and several bulletins on special topics published by the Bureau at various times. The Report of the Royal Commission, though published before the Bureau of Mines was established, naturally claims a place in the Index, since it comprehends most of the information of a similar character available at the time it was printed, as well as much valuable historical data. It was upon the recommendation of the Commission that the Bureau was created.

From the First up to and including the Seventh of the Bureau's reports, namely, from 1891 to 1897, the volumes bear on the title page the year to which the Report particularly applies, and for which the statistics of output, etc., are given. A change was made in 1898 which caused the reports to bear the year in which they were actually printed. The Report for 1897 has "1898" on the title-page, but "1897" on the cover of the cloth-bound copies. The next, or Eighth Report, being for the year 1898, is marked "1889" both on title-page and cover, and this practice has been followed since that time. The change has led to some confusion in referring to the reports, and in citing them it is better to do so by the number of the volume than by the year. Thus the Report carrying on the cover the date "1896" is the Sixth Report, but the volume with the date "1904" is the Thirteenth, not the Fourteenth. Each volume is provided with an Index as well as a Table of Contents, and in this way the possessor of a set of the Bureau's Reports is able, by searching, to ascertain what of interest or value they contain on any given mineral, locality, or topic. Such information may be fragmentary and incomplete, or it may be full and definite, exactly what the inquirer is looking for; or it may give some clue or hint by means of which further and more complete data may be obtained from other sources. But the sixteen indexes to the sixteen Reports necessitate sixteen separate searches in order to locate everything that may be in all the Reports on any given subject, and time is money in this busy age. All the references to the subject in the whole sixteen volumes are now brought together in the General Index, and in one search instead of sixteen the inquirer can complete his quest.

Nor are convenience and the saving of time the only advantages which the General Index possesses over the indexes to the individual volumes. The separate indexes are not the work of one hand, nor are they compiled on a common plan. Hence they differ in perspective and detail, and to some extent are of unequal value. To be able to make a good index of a volume dealing in technical terms and with special branches of knowledge, presumes an extensive and accurate acquaintance, both with the

terminology and the subject matter of the volume. If this is absent the sense of preportion is wanting, important matters are apt to be slighted and trifling ones given
too much space. The General Index, being the work of one man only, and being
compiled, not from the indexes of the separate volumes, but from the text of the
Reports themselves, is uniform in plan throughout, and is made with an adequate
knowledge of geology, mineralogy, paleontology, metallurgy, mining and the other
sciences and subjects which form the bulk of the matter contained in the several
Reports. In some measure it is more than an index; it is a summary of the information which the Reports comprise, and will, it is beped, by making the results obtained
by the Bureau more accessible, render them more useful.

It will probably be found that the Index contains mistakes. The reports themselves are not free from mistakes. Errors creep in through defects of memory, manuscript and proof-reading. Statements accepted in good faith at second-hand, when traced to their original source, are found to have been incorrectly queted or condensed, and errors of fact occasionally occur for which reasonable explanation is wanting. Even broken or imperfect type or incorrect spelling may lead to inaccuracy of statement. Machine-set type is prolific of inaccuracies, since the correction of one printer's error, especially if the number of lines be increased or diminished, may necessitate the re-setting of a whole paragraph, in which fresh errors may be made, requiring fresh corrections.

The Bureau's Reports have one and all been prepared, edited and preof-read, with much care, and the number of errors, small and great, is probably not in excess of what would be found in any other sixteen volumes of similar character. Wherever possible, errors in orthography or nomenclature have been corrected in the Index. If mistakes are detected in the Index itself, the Bureau will be glad to be notified of them, so that they may be rectified in any subsequent edition.

The earlier volumes of the Bureau are entirely out of print, and indeed this is the case with many of the later volumes as well. The only report of which any considerable number of copies remains on hand is the Tenth, printed in 1901. An extra edition was published for distribution at the Pan-American Exposition, held at Buffalo, N.Y., in that year, of which some hundreds are still left.

The Bureau has from the beginning supplied its Reports to a considerable number of public and educational institutions, such as universities, technical colleges, engineering societies, etc., not only in Canada, but also in the United States and Great Britain, so that full sets of its volumes may be consulted in many, if not all, of the leading cities and centres of the mining industry in these countries. To all such copies of the General Index will be sent. It is no longer possible to supply full, or even reasonably complete sets of the reports, but the Bureau will be glad to fill up gaps in public and private libraries to the extent of its ability.

Owing to the fact of the earlier volumes being difficult to procure, the Index has been made more complete than would otherwise have been deemed necessary, in the hope that the information supplied may, in many cases, be a useful substitute for that contained in the volumes themselves.

The edition of the General Index is limited to one thousand copies, all bound in linen cloth.

It only remains to say that the author of the Index, Mr. Frank J. Nicolas, of Ottawa, has performed his task with rare assiduity, diligence and success. His qualifications for the work have proven all that could be desired.

Your obedient servant,

THOS. W. GIBSON,
Deputy Minister of Mines.

Office of the Bureau of Mines, Toronto, 26 January, 1909.



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Index map (uncolored) showing mining properties in Coleman.	
Plan (uncolored) of Bloom lake area.	

#### BULLETINS

- No. I. The Gold Fields of Western Ontario, 1896. A preliminary report by Prof. A. P. Coleman, Ph.D.
- No. II. Anthracitic Carbon or Anthraxolite, 1896. By Prof. A. P. Coleman. Republished under the title of "Anthraxolite or Anthracitic Carbon" in the Sixth Report.
- No. III. Michipicoton Mining Division, 1897. A Preliminary Report by Arthur B. Willmott, M.A., B.Sc. Re-published in Seventh Report, Part II.

- Willmott, M.A., B.Sc. Re-published in Seventh Report, Part 11.

  No. IV. Mineral Production of Ontario for 1901. By Thos. W. Gibson.

  No. V. Peat Fuel: Its Manufacture and Use, 1900. By W. E. H. Carter, B.A., Sc. Re-published in Twelfth Report.

  No. VI. Mineral Production of Ontario for 1903. By Thos. W. Gibson.

  A separate volume under the title "The Gold Fields of Ontario" was published in 1897. Its contents were "Second Report on the Gold Fields of Western Ontario," by Dr. A. P. Coleman, "A Tour of Inspection in Northwestern Ontario," by A. Blue, that Proposed Fields of Western Ontario, "By A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by A. Blue, "The Cold Fields of Western Ontario," by The Cold Fields of Western Ontario, "The Cold Fields of Western Ontario," by The Cold Fields of Western Ontario, "The Cold Fields of Western Ontario," by The Cold Fields of Western Ontario, "The Cold Fields of Western Ontario," by The Cold Fields of Western Ontario, "The Cold Fields of Western Ontario," by The Cold Fields of Western Ontario, "The Cold Fields of Western Ontario," by The Cold Fields of Western Ontario, "The Cold Fields of Western Ontario," by The Cold Fields of Western Ontario, "The Cold Fields of Western Ontario," by The Cold Fields of Western Ontario, "The Cold Fields of W (both re-published from the Fifth Report of the Bureau), "The Gold Fields of Western Ontario," (being Bulletin No. 1), and a short general introduction, by Mr. Blue.

#### **EXPLANATION OF INDEX**

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#### NOTES

All places referred to in this Index are in Ontario unless otherwise mentioned.

The rnlings of the Geographic Board of Canada have been adopted for the orthography of all places in the Dominion.

For purposes of more exact reference certain areal names are used in the Index that are not the names of judicial or mining divisions, but refer to areas covered by published geological sheets. These are:

Manitou district, comprising that part of Rainy River district to the east of the Lake of the Woods and north of Rainy lake, extending from Hawk Lake Station to Taché station on the Canadian Pacific railway, and from the foot of Manitoulin lake to a few miles north of the railway.

Seine River district, comprising that part of Rainy River district lying to the north of Hunter island, and extending from the boundary of Thunder Bay district westerly nearly to Rainy lake.

Shebandowan district, comprising that part of Thunder Bay district lying between its western boundary and Thunder Bay and extending north and south between Carlstadt station and Port Arthur.

#### **ABBREVIATIONS**

Alg.-District of Algoma.

B.C.-Province of British Columbia.

C.P.R .- Canadian Pacific Railway.

G.T.R .- Grand Trunk Railway.

H.B.C .- Hudson's Bay Co.

Kee .- Provisional district of Keewatin,

Lab.—Labrador and the provisional district of Ungava.

Man .- Province of Manitoba.

N.B .- Province of New Brunswick.

N.S.-Province of Nova Scotia.

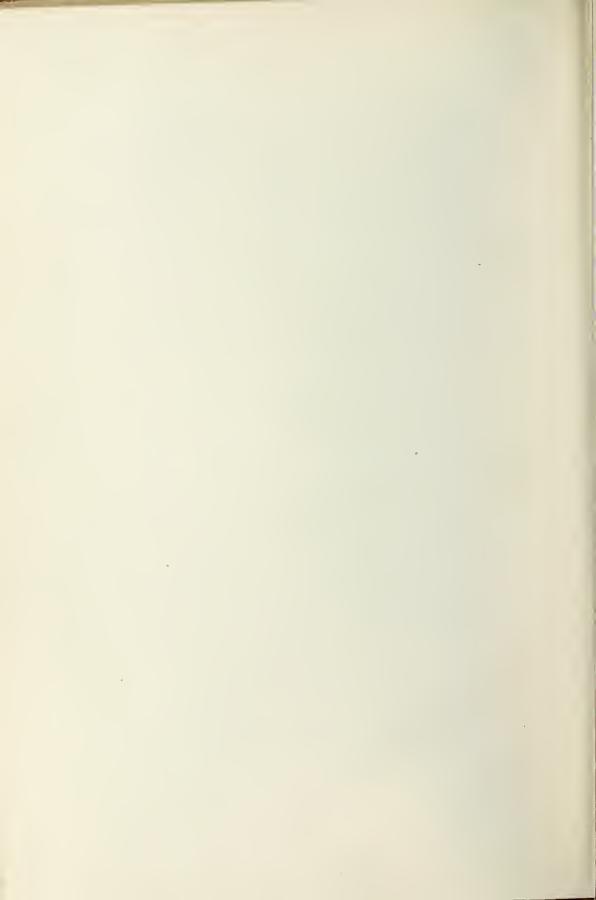
Nip.—District of Nipissing.

Ont .- Province of Ontario.

R.C.—Royal Commission on the Mineral Resources of Ontario.

R.R.d.—Rainy River district.

Th.B.d.—Thunder Bay district.



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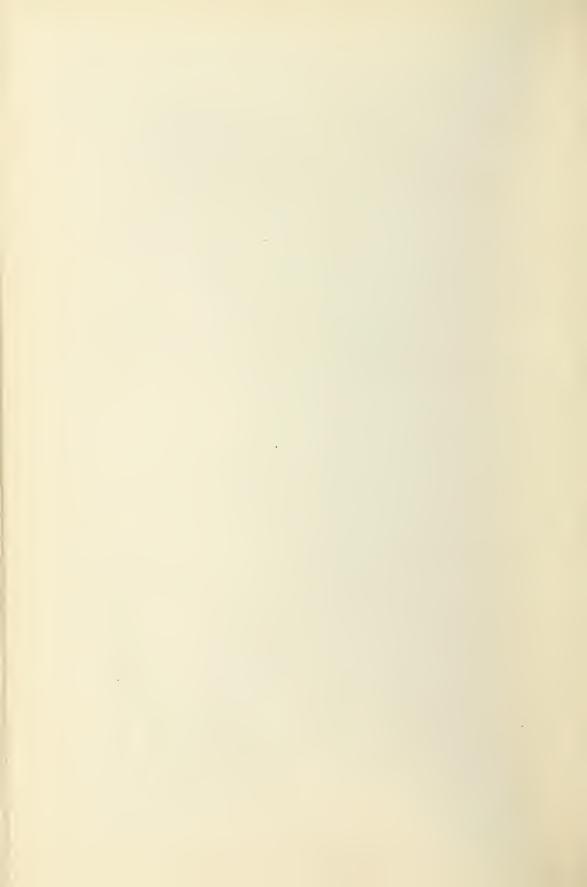
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